

**Statement of Ambassador Linton F. Brooks
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Before the
Senate Armed Services Committee
Subcommittee on Strategic Forces**

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Mr. Chairman, thank you for the opportunity to appear before you today to discuss the Administration's views on nuclear policy, U.S. nuclear forces, the nuclear weapons stockpile to support those forces, and ongoing work on implementing the 2001 Nuclear Posture Review (NPR). I also want to thank all of the Members for their strong support for our critical national security activities. Before I begin my remarks, I would like to say how pleased I am to be on this panel today with my friend and colleague, Admiral James Ellis, Commander of the United States Strategic Command, who will present the military perspective on the same issues.

Overview of the Nuclear Posture Review

Since before he took office, President Bush has been committed to achieving a credible deterrent with the lowest number of nuclear weapons consistent with current and future national security requirements. On 1 May 2001, at the National Defense University, he articulated his vision:

Nuclear weapons still have a vital role to play in our security and that of our allies. We can, and will, change the size, the composition, the character of our nuclear forces in a way that reflects the reality that the Cold War is over. I am committed to achieving a credible deterrent with the lowest-possible number of nuclear weapons consistent with our national security needs, including our obligations to our allies. My goal is to move quickly to reduce nuclear forces. The United States will lead by example to achieve our interests and the interests for peace in the world.

The President recognized clearly that, almost a decade after the collapse of the Soviet Union, it was time to conduct a fundamental examination of the role of nuclear weapons in the post-Cold War world. The results of that reexamination were described in the December 2001 Nuclear Posture Review. The purpose of that review was to set forth the direction for American nuclear forces over the next decade and beyond. Let me highlight some key points about the review.

The Nuclear Posture Review reassessed the role of nuclear forces and their contribution toward meeting defense policy goals. It reaffirmed that nuclear weapons, for the foreseeable future, will remain a crucial element of U.S. national security strategy. But, consistent with the changed international environment, the Nuclear Posture Review represented a radical departure from the past and the most fundamental re-thinking of the roles and purposes of nuclear weapons in almost a quarter-century. Among the many changes, three are the most important:

- Instead of focusing on deterring the nuclear threat posed by a single, specific enemy, as in the Cold War, it established the need for a capabilities-based force to accomplish four distinct defense policy goals.

- Instead of treating nuclear weapons in isolation, it considered them as an integrated component of American military power, thus allowing us to achieve national security objectives through other means that previously could only have been addressed with nuclear weapons.
- Instead of treating the future as static and predictable, it recognized that requirements could change and that U.S. nuclear forces must be prepared to respond to those changes, including by increasing the fraction of the force that is deployed.

Let me discuss each of these in turn.

The Policy Goals of U.S. Nuclear Forces

Under the new thinking of the Nuclear Posture Review, our nuclear forces serve four goals:

- To *assure* allies of our commitment to them and our ability to make good on that commitment. The implications of this goal are that forces must be effective and reliable. Assurance serves our non-proliferation objectives because those allies with the capability to develop nuclear weapons can continue to forego doing so, safe in the knowledge of the reliability of the U.S. nuclear umbrella.
- To *dissuade* potential adversaries from trying to match our capabilities or from engaging in strategic competition. This requires that we maintain a combination of forces and infrastructure so that no potential power can have any hope of matching our capability and will be dissuaded from attempting to do so.
- To *deter* any threats that do emerge. This implies an ability to hold at risk those elements of power that a potential adversary values. I will say more on this point in a moment.
- To *defend* against and *defeat* those threats that, for whatever reason, we do not deter.

The first two policy goals help determine the size of our nuclear forces, while the second two govern the nature of those forces. As the Committee will readily see, these goals are, in a sense, the goals of our entire military. That is why Admiral Ellis often says that we should, perhaps, refer to the Nuclear Posture Review more generally as a Strategic Posture Review.

The New Triad

Had Admiral Ellis and I appeared before you a few years ago, we would have spoken of a “triad” of strategic nuclear forces. This triad included bombers, ICBMs and Submarine Launched Ballistic Missiles, each with unique strengths that operated synergistically to ensure our ability to retaliate under any condition of war initiation. The Nuclear Posture Review broadens our thinking to encompass a New Triad of flexible response capabilities consisting of:

- Non-nuclear and nuclear strike capabilities including systems for command and control,
- Active and passive defenses including ballistic missile defenses,

- R&D and industrial infrastructure needed to develop, build, and maintain nuclear offensive forces and defensive systems.

To provide a practical means to implement this new, integrated approach, the President established a new Strategic Command, with responsibility for global strike—both nuclear and non-nuclear—and for integrating missile defenses with offenses.

Contrary to some press reports, this new triad—and the Nuclear Posture Review generally—continued the trend of the past decade towards a reduced reliance on nuclear forces in U.S. national security strategy. The new emphasis on ballistic missile defenses means that the U.S. will no longer be as heavily dependent on offensive strike forces to enforce deterrence as it was during the Cold War. The strengthening of non-nuclear strike forces—including precision conventional strike and information operations—means that the U.S. will be less dependent than it has been in the past on nuclear forces to provide offensive deterrent capabilities.

Present and Future Nuclear Stockpiles

Our new approach, coupled with the judgment that we no longer need to plan our forces as if Russia presented an immediate threat to the United States, was the basis for dramatic reductions—codified in the Moscow Treaty—in operationally deployed strategic nuclear forces. Over the next eight years, the United States will cut the number of deployed warheads by approximately two-thirds from today's level. But the experience of the past decade and a half makes it clear that it is unwise for us to base our security on the false belief that we can predict the future. Thus, while dramatically reducing the number of deployed weapons, we must plan against an uncertain future.

Specifically, the United States needs to be prepared to respond to both unforeseen technical problems and unanticipated geopolitical change. One element of such a response is a responsive infrastructure, which I will discuss in a moment. But another component of such a response is the non-deployed stockpile. As part of its plan to implement the Nuclear Posture Review, the Administration is conducting an assessment that, when completed, will clarify the long-term requirements for non-deployed weapons. The Congress requested such a revised stockpile plan as well. The Administration is working to complete this complex task as soon as possible. While we regret the delay, the importance of nuclear weapons to our security makes it imperative to conduct a thorough review.

While I am not prepared to provide specifics—and could not do so in an unclassified forum in any case—I can provide some of the considerations factoring into the review. The 2012 nuclear stockpile will be substantially reduced from current levels. But reductions will not lower the stockpile to 1700-2200 total warheads. Additional warheads over and above the operationally deployed strategic warheads will be needed for routine maintenance of the stockpile including as logistics spares and to replace those warheads eliminated during destructive surveillance testing.

In addition, a small number of warheads (reduced by 90% from Cold War levels) for U.S. non-strategic nuclear forces will be retained, among other things, to meet commitments to allies.

Finally, warheads over and above the operationally deployed force will be retained over the near term for prudent risk management in connection with mitigating geopolitical and technical risks. In particular, sufficient warheads will be retained to augment the operationally deployed force in the event that world events require a more robust deterrence posture.

We also must preserve diversity of warhead types in the overall stockpile in order to mitigate technical risks. Although we are making progress in restoring a responsive nuclear weapons production infrastructure, we are not yet able to produce replacement warheads in sufficient quantity to respond if a technical problem called into question the safety or reliability of one or more warheads critical to our nation's deterrent. Thus, for example, we are planning to deploy two types of ICBM warheads—the W87 and W78—and will retain sufficient numbers of these two types in reserve so that if a technical failure occurred in one type, there would be sufficient warheads of the other type to restore the operationally-deployed ICBM force. We seek to apply this approach, where appropriate, to other nuclear delivery means.

Responsive Nuclear Weapons Infrastructure

Of the many new concepts in the Nuclear Posture Review, one of the most important is formal recognition that a robust defense R&D and industrial base—a key element of which is a *responsive nuclear weapons infrastructure*—is as important as strike forces or defenses in achieving our overall defense goals. The demonstrated capabilities of the defense scientific, technical and manufacturing infrastructure, including its ability to sustain and adapt, provides the U.S. with the means to respond to new, unexpected, or emerging threats in a timely manner.

If we can employ this infrastructure to produce new or replacement warheads on a timescale in which geopolitical threats could emerge, or in response to stockpile “surprise”, then we can go much further in reducing the standing stockpile and meet the President's vision of the smallest stockpile consistent with our nation's security.

By “responsive” we refer to the resilience of the nuclear weapons enterprise to unanticipated events or emerging threats, and the ability to anticipate innovations by an adversary and to counter them before our deterrent is degraded—all the while continuing to carry out the day-to-day activities in support of the stockpile. Unanticipated events could include complete failure of a deployed warhead type. Emerging threats could call for new or modified warhead development, or for providing additional warheads for force augmentation.

A key measure of “responsiveness” is how long it would take to carry out certain activities to address stockpile “surprise” or deal with new or emerging threats. Specific goals have been established for several activities; our progress towards meeting them is an important measure of the success of our program:

- ***Fix stockpile problems:*** The ability to assess a stockpile problem, once one has been identified, and then design, develop, implement and certify a fix will depend on the nature and scope of the problem. For a relatively minor problem, our goal is to be able to deploy warheads modified to overcome the problem within one year.

- ***Adapt weapons:*** Our goal is to achieve a capability to modify or repackage existing warheads within 18 months of a decision to enter engineering development. I note that under current law such a step would require Congressional approval.
- ***New warhead design, development and initial production:*** Our goal is to be able to design, develop, and begin production of a new warhead within 3-4 years of a decision to enter engineering development. Among other things this capability is critical to reduce reliance on warheads that are beyond their life expectancies. Once again, Congressional approval would be required. While there are no current plans to develop new weapons, maintaining the capability is an important pre-requisite to extensive reductions.
- ***Quantity production of new warheads:*** Our goal is to maintain sufficient production capacity to produce new warheads in sufficient quantities to meet any defense needs that arise without disrupting ongoing refurbishments. In the near term, refurbishment demands, starting later this decade and continuing until about 2014, will dominate production capacity.
- ***Support for force augmentation:*** We must assure that services such as warhead transportation, tritium support, etc., are not “long poles in the tent” for force augmentation—they must be capable of being carried out on a time scale consistent with the Department of Defense’s ability to deploy weapons.
- ***Underground nuclear test readiness:*** We have no plan to resume testing; our efforts to improve test readiness are a prudent hedge against the possibility of a problem arising in the stockpile that cannot be confirmed, or a fix certified, without a nuclear test. Our goal is to achieve an 18-month test readiness posture as directed by the Defense Authorization Act. Eighteen months is appropriate because that is a typical time to diagnose a problem and design a test to confirm the problem or certify the fix.

A responsive infrastructure has both intellectual and physical dimensions. Intellectually, the Administration’s proposals to examine new advanced concepts will allow us to train the scientists and engineers who must provide the design underpinning for a responsive infrastructure. Physically, restoring a capability to produce plutonium pits in sufficient quantities will be essential. The Modern Pit Facility—or, more accurately, a pit rework facility—will support the pit remanufacturing needs of the entire stockpile. It is important to understand that we need this facility even if the United States never produces another new weapon. All existing plutonium pits will ultimately need to be rebuilt due to aging effects, for example, caused by radioactive decay of plutonium.

We are just beginning the transformation to a responsive nuclear weapons infrastructure. I call for your support in this important endeavor.

Near Term Implications

Let me now discuss two specific elements of the Administration’s budget request and how they relate to the principles we have been discussing. The Nuclear Posture Review highlighted the importance of ensuring that the weapons complex can adjust to the changing requirements of

nuclear deterrence in the coming decades. In FY 2005, we propose continuing a modest research effort on Advanced Concepts to meet potential new or emerging requirements. We also propose continuing the Robust Nuclear Earth Penetrator feasibility and cost study now underway.

Because there has been a great deal of discussion on the implications of these two programs, I would like to review them in some detail. We intend to use advanced concepts funds to investigate new ideas, not necessarily new weapons. For example, we are beginning a study examining the feasibility of adapting an existing nuclear warhead to provide a cruise missile capability that incorporates enhanced safety and use control. Some additional work is underway to examine the feasibility of improving warhead design margins in order to ensure continued high confidence in warhead reliability without nuclear testing. We are also in discussion with the Air Force on examining the utility of nuclear weapons to destroy chemical and biological agents, although no decisions to study this area have yet been reached. The Departments of Defense and Energy will jointly determine the specific uses of the remaining FY 2004 and the proposed FY 2005 funds.

Perhaps the single most contentious issue in our budget request is continued funding for the Robust Nuclear Earth Penetrator study. This study is to determine whether existing warheads – the B61 and the B83—could be adapted without nuclear testing to improve our ability to hold at risk hardened, deeply buried facilities that may be important to a future adversary. I want to correct several misconceptions about this effort:

- There is a clear military utility to such a weapon, which is why the Defense Department asked for it to be studied. A classified report was submitted to this committee last year on this subject and remains valid.
- Despite this utility, we will move beyond the study stage only if the President approves and funds are authorized and appropriated by the Congress. We included funds in our out-year projections only to preserve the President's options. No decision will be made until the study is completed. The law is clear that beginning development engineering requires Congressional approval.
- Even if deployed, this weapon does not represent a change from our policy goal of deterrence. Deterrence requires we be able to hold at risk that which an adversary values. Our efforts to determine the potential effectiveness of an earth penetrating weapon reflect a continued emphasis on enhancing deterrence. Once again I refer you to the classified report submitted last year.

Nuclear Misconceptions

Let me conclude my statement by addressing three misconceptions that have been raised both by members of Congress and by others:

- That we sought repeal of the Prohibition on Low-Yield Warhead Development in order to develop and field new, low-yield nuclear weapons,

- That in doing so we will blur the distinction between nuclear and conventional weapons, making nuclear use more likely, and
- That nuclear weapons research and development necessarily undercuts U.S. nonproliferation efforts.

While press accounts have spoken of Administration plans to develop new, low yield weapons, there are no such plans. Nor does repeal of the Prohibition on Low-Yield Warhead Development commit the United States to developing, producing or deploying new, low-yield warheads. Such warhead concepts could not in any case proceed to full-scale development, much less production and deployment, unless Congress authorizes and appropriates the funds required. Repeal of this vague restriction simply removed the chilling effect on scientific inquiry that has hampered our scientists' ability to explore technical options of any yield because such options "could lead to" designs of less than five kilotons. Our scientists need the freedom to explore new concepts both to maintain and exercise their intellectual capabilities and to respond to needs that one day might be articulated by this or a future President.

Nor are U.S. research and development programs blurring the line between conventional and nuclear weapons, making nuclear use more likely. This is not simply an assertion, but is empirically based. Recall that from the 1950's and continuing through today, the U.S. nuclear stockpile has contained warheads capable of producing very low nuclear yields. At the height of the Cold War many thousands of these warheads were deployed, but never used—even in regional confrontations where their use would not necessarily have provoked a Soviet response. There is no evidence that the simple possession of these weapons made nuclear use by the United States more likely. To be clear, only the President can authorize use of U.S. nuclear weapons and no President would be inclined to employ any nuclear weapon, irrespective of its explosive power, in anything but the gravest of circumstances. Simply put, the nuclear threshold for the United States has been, is, and always will be very high.

Along these lines, the Nuclear Posture Review emphasized an increasing potential to base deterrence more on non-nuclear and missile defense capabilities, and called for development of high-precision, advanced conventional weapons to replace nuclear systems, where possible, to further reduce our reliance on nuclear forces to deter aggression.

Finally, the major U.S. nonproliferation objective is to prevent rogue states and terrorist groups from acquiring weapons of mass destruction and systems for their delivery. Neither advanced concepts efforts nor studies of an earth-penetrating weapon will increase incentives for *terrorists* to acquire such weapons—those incentives are already high and are unrelated to U.S. capabilities. Nor are they likely to have any impact on *rogue states*, whose proliferation activities march forward independently of the U.S. nuclear program. Over the past decade we have seen very significant reductions in the numbers of U.S. (and Russian) nuclear weapons, reductions in the alert levels of nuclear forces, and the abandonment of U.S. nuclear testing. No new warheads have been deployed and there has been little U.S. nuclear modernization. There is absolutely no evidence that these developments have caused North Korea or Iran to slow down covert programs to acquire capabilities to produce nuclear weapons. On the contrary, those programs have accelerated during this period.

Conclusion

Mr. Chairman, the United States will continue to lead the way to a safer world through the deep reductions in nuclear forces codified by the Moscow Treaty, through Nunn-Lugar and other cooperative threat reduction efforts, and through other actions. At the same time, although conventional forces will assume a larger share of the deterrent role, we will maintain an effective, reliable, and capable—though smaller—nuclear force as a hedge against a future that is uncertain and in a world in which substantial nuclear arsenals remain. Our ongoing efforts to reduce the current stockpile to the minimum consistent with national security requirements, to address options for transformation of this smaller stockpile, and to restore a responsive nuclear weapons infrastructure are key elements of the Administration's national security strategy. Carrying out these efforts will pose no risk to critical U.S. nonproliferation objectives.

Mr. Chairman, this concludes my statement. I look forward to your questions.